



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,304	07/01/2003	Michael Andrew Fischer	050337-1200 (05CXT0059WL)	5599
20306 7590 03/16/2009 MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP 300 S. WACKER DRIVE 32ND FLOOR CHICAGO, IL 60606			EXAMINER DAVENPORT, MON CHERI S	
			ART UNIT 2416	PAPER NUMBER
			MAIL DATE 03/16/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/611,304	<b>Applicant(s)</b> FISCHER ET AL.	
	<b>Examiner</b> MON CHERI S. DAVENPORT	<b>Art Unit</b> 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12/02/2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 2,3,6,7 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1, 4-5, 8-11, 13-21, and 23-29** rejected under 35 U.S.C. 103(a) as being unpatentable over Kawarai et al. (US patent Number 2001/0033581) in view of Phillips et al. ( US Patent Application Publication 2002/0085497) in further in view of Desai et al. ( US Patent Application Publication 2002/0138854).

Regarding **Claims 1, 5 and 21** Kawarai et al. discloses a method comprising:

queuing said first portion of said first frame( see figure 1, portion of divided sent to buffer( queue), see [0093], lines 1-6, packet divided and received by buffer(queue) a first portion)

inititiating a transmission of said first portion of said first frame into a shared-communications channel (see [0094], lines 16-20, packets are output(transmitting) from the input buffer); and

receiving a second portion of said first frame after said transmission of said first portion has started (see figure 1, receiving a second portion of packet divided by packet divider, see [0093], lines 1-6, packet divided and received by buffer a second portion )

Kawarai fails to specifically point out in response to said initiating of said transmission of said first portion, receiving a second portion of said first frame after said transmission of said first portion has started as claimed.

Phillips et al. teaches in response to said initiating of said transmission of said first portion, receiving a second portion of said first frame after said transmission of said first portion has started( see [0089], lines 4-16, the data is process using a pipelines process until the last data cell( divided packet) has been received and processed)

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Kawarai invention with Phillip et al. invention because Phillips et al. invention eliminates central processors as a potential bottleneck in the transmission path between a non-volatile memory and a switching fabric (see Phillips et al. [0015], lines 10-13).

Kawarai in view of Phillips et al. fail to specifically point storing a description of a first frame wherein said description comprises, a frame length, a first transmission rate; receiving a first portion of said first frame wherein the length of said first portion is less than said frame length and is based on said first transmission rate, transmitting at said first transmission rate as claimed.

Desai et al. teaches storing a description of a first frame wherein said description comprises (see [0352], lines 1-5, storing in the original descriptor field, see figure 37A-B)

(1) a frame length (see [0352], lines 1-5,packet size, figure 37A-B)

Art Unit: 2416

(2) a first transmission rate(data rates) (see [0352], lines 1-5,sustained rate, peak rate, figure 37A-B)

receiving a first portion of said first frame wherein the length of said first portion is less than said frame length and is based on( the term ‘based on’ is a broad term in which the term ‘based on’ is interpreted broad as the length of the first portion is related to a first transmission rate) said first transmission rate ( see figure 1, receiving a first portion of packet divided by packet divider, see [0093], lines 1-6, packet divided and received by buffer a first portion )

transmitting at said first transmission rate (see [0352], lines 1-5, sustained rate for transmitting).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Kawarai et al. in view of Phillips et al. invention with Desai et al. invention because Desai et al. invention provides an access technology that can expand the bandwidth available to an end user( see Desai et al. [0008], lines 5-9).

Regarding **claims 4, 8 and 23** Kawarai et al. in view Phillips et al. in further in view of Desai et al. discloses everything claimed as applied above (see claims 1 and 21).

Kawarai et al. discloses queuing said second portion of said first frame wherein the length of said second portion is less than said frame length, and is based on said first transmission rate and the time required to receive said second portion (see figure 1, receiving a second portion of packet divided by packet divider, see [0093], lines 1-6, packet divided and received by buffer( queuing) a second portion, second portion is related to ( based on ) a transmission rate,)

Art Unit: 2416

Regarding **claims 9, 16, 20 and 29** Kawai et al. in view Phillips et al. in further in view of Desai et al. discloses everything claimed as applied above (see claim 5). In addition the apparatus includes:

Desai et al. teaches wherein said transmitter operates in accordance with the IEEE 802.11 air interface protocol (*see [0008], lines 1-9, communication network, and broadband internet*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Kawai et al. invention with Desai et al. invention because Desai et al. invention provides an access technology that can expand the bandwidth available to an end user( see Desai et al. [0008], lines 5-9).

Regarding **Claims 10, 13, 17 and 25-27** Kawai et al. in view Phillips et al. in further in view of Desai et al. discloses a method comprising:

Kawai et al. teaches transmitting said first portion of said first frame into a shared-communications channel (see [0094], lines 16-20, packets are output (transmitting) from the input buffer); and

queuing a first portion of a first frame a first portion of a second frame and second queue, respectively, wherein said first portion are less than a full frame length, and is based on said first transmission rate, first frame comprises m octets (reads on fixed size packets) (see figure 1, portion of divided sent to buffer (queue), see [0093], lines 1-6, packet divided and received by buffer (queue) a first portion,)

Art Unit: 2416

transmitting said first portion of said second frame at said second transmission rate into said shared-communications channel(see [0094], lines 16-20, packets are output(transmitting) from the input buffer)

queuing said second portion of said first frame, second frame comprises n octets(reads on fixed size packets) ( see figure 1, portion of divided sent to buffer( queue), see [0093], lines 1-6, packet divided and received by buffer(queue) a first portion, then second portion).

Kawarai et al. fails to specifically point out in response to said transmitting of said first portion of said first frame, queuing a second portion of said first frame as claimed.

Phillips et al. teaches in response to said transmitting of said first portion of said first frame, queuing a second portion of said first frame( see [0089], lines 4-16, the data is process using a pipelines process until the last data cell( divided packet) has been received and processed).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Kawarai invention with Phillip et al. invention because Phillips et al. invention eliminates central processors as a potential bottleneck in the transmission path between a non-volatile memory and a switching fabric (see Phillips et al. [0015], lines 10-13).

Desai et al. teaches storing a first description wherein said first description comprises (see [0352], lines 1-5, storing in the original descriptor field, see figure 37A-B)

1) a first frame length (see [0352], lines 1-5, packet size, figure 37A-B)

Art Unit: 2416

(2) a first transmission rate (data rates) (see [0352], lines 1-5, sustained rate, peak rate, figure 37A-B)

storing a second description wherein said second description comprises (see [0352], lines 1-5, storing in the original descriptor field, see figure 37A-B)

(1) a second frame length (see [0352], lines 1-5, packet size, figure 37A-B)

(2) a second transmission rate (data rates) (see [0352], lines 1-5, sustained rate, peak rate, figure 37A-B).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Kawarai et al. in view of Phillips et al. invention with Desai et al. invention because Desai et al. invention provides an access technology that can expand the bandwidth available to an end user (see Desai et al. [0008], lines 5-9).

Regarding **claims 11, 14, 18 and 28** Kawarai et al. in view Phillips et al. in further in view of Desai et al. discloses everything claimed as applied above (see claim 10). In addition the method includes:

Desai et al. teaches said description further comprises a first transmission rate, wherein said second description further comprises a second transmission rate, and wherein said first transmission rate and said second transmission rate are different (see figure 37A-B, sustained rate, peak rate, first transmission rate related to first frame portion, being different from the second transmission rate, related to second portion of frame).

Art Unit: 2416

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Kawarai et al. invention with Desai et al. invention because Desai et al. invention provides an access technology that can expand the bandwidth available to an end user( see Desai et al. [0008], lines 5-9).

Regarding **claims 15, 19 and 23** Kawarai et al. in view Phillips et al. in further in view of Desai et al. discloses everything claimed as applied above (see claim 10). In addition the method includes:

Desai et al. teaches queuing a second portion of said second frame wherein the length of said second portion is less than said second frame length and is based on( the term ‘based on’ is a broad term in which the term ‘based on’ is interpreted broad as the length of the first portion is related to a first transmission rate) said second transmission rate ( see figure 1, receiving a second portion of packet divided by packet divider, see [0093], lines 1-6, packet divided and received by buffer a second portion ).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Kawarai et al. invention with Desai et al. invention because Desai et al. invention provides an access technology that can expand the bandwidth available to an end user( see Desai et al. [0008], lines 5-9).

***Allowable Subject Matter***

3. **Claims 2, 3, 6, 7, and 22** objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

4. Applicant's arguments with respect to claims 1-11 and 13-29 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MON CHERI S. DAVENPORT whose telephone number is (571)270-1803. The examiner can normally be reached on Monday - Friday 8:00 a.m. - 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2416

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mon Cheri S Davenport/  
Examiner, Art Unit 2416  
March 11, 2009

/Brenda Pham/  
Primary Examiner, Art Unit 2416